

Utah Combats Invasive Mussel Threat

Efforts from 2007–2010

What is the problem?

Invasive mussels—small, clam-like creatures—have been found in neighboring states' waterways. These animals reproduce rapidly and pose a huge threat to Utah's water resources. Just how serious is this problem? In other states, these species have:

- Cost billions of dollars to control
- Jeopardized essential power and water infrastructures
- Destroyed recreation areas and equipment
- Severely damaged ecosystems, displacing native and sport species

In the United States, congressional researchers estimated that the zebra mussel cost the power industry \$3.1 billion from 1993–1999, with an impact on industries, businesses and communities of more than \$5 billion (New York Sea Grant 1994a). If either the zebra or quagga mussel establish populations in Utah, they are predicted to cost the state \$15 million per year in increased operation and maintenance costs.

Invasive mussels quickly clog water intake pipes. If these animals establish populations in Utah reservoirs, our water transport facilities will deliver less water and require additional maintenance. They may also suffer temporary—but frequent—closures to remove mussels from equipment.



When this photo was taken by a DWR employee, the boat had been out of Lake Mead for 36 hours—the mussels were still alive.

Funding, progress and partnerships

In 2007, the State of Utah recognized the urgent threat that invasive mussels posed to Utah's water systems, hydroelectric plants, recreation areas and aquatic wildlife. The Utah Division of Wildlife Resources (DWR) immediately began to raise public awareness and to perform some early-detection sampling. These efforts were a high priority, even before funding was allocated.

During the 2008 legislative session, the Utah Legislature took swift action to protect Utah's waters. Lawmakers passed the Aquatic Invasive Species Interdiction Act and allocated ongoing funding for a multipronged education, detection and prevention effort.

To combat the invasive mussel threat, the Legislature approved a supplemental budget of \$1,106,500 from General Funds for FY 2008. Lawmakers also approved \$1,400,000 in ongoing General Funds for FY 2009. During the boating seasons of 2008 and 2009, the DWR has used those funds to:

- Inspect more than 100,000 boats—and educate their owners—before they entered Utah lakes and reservoirs.
- Decontaminate more than 1,200 boats that had recently boated in infested waters outside Utah.
- Acquire 32 trailer-mounted decontamination units and deploy them statewide.
- Launch an aggressive statewide outreach and education effort involving news media, brochures, billboards, boat-ramp signs and recreation area posters.
- Assign and equip more than 60 personnel (primarily biologists, inspection technicians and conservation officers) to educate boaters and to inspect watercraft.
- Sample more than 40 lakes and reservoirs for the presence of quagga and zebra mussels. Although mussel DNA has been identified in two Utah waters, no adult mussels have been found in the state.
- Draft an Aquatic Invasive Species management plan that has been approved by Utah's governor and now awaits final approval by the U.S. Fish and Wildlife Service.

Federal partners have been impressed by Utah's effort and have agreed to an ongoing, in-kind match. The National Park Service at Lake Powell is planning to commit \$1,523,404 to the effort between FY 2009 and FY 2011. The U.S. Forest Service will provide \$99,000 from its current FY 2009 budget. For FY 2010, Utah has received nearly \$500,000 in matching funds from its partners.

Ongoing efforts and funding

In 2008, boat-ramp surveys revealed that the DWR's education effort was effective. Nearly 90 percent of boaters were aware of the mussel threat. The DWR and Utah Legislature want to see similar results in the future and to ensure boaters' compliance with the "Clean, Drain, Dry" message. To fund this ongoing education and enforcement effort—and to protect Utah's waters, diversion structures and aquatic wildlife—Utah lawmakers approved \$1,400,000 for the DWR's FY 2010 budget.

-Published July 6, 2009